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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PIERLUIGI PUGLIESE

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Appeal 2008-3710  
Application 10/693,470  
Technology Center 2600

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Decided: October 20, 2008

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Before MAHSHID D. SAADAT, SCOTT R. BOALICK,  
and JOHN A. JEFFERY, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-25. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

## STATEMENT OF THE CASE

Appellant invented a method for ascertaining the state of a mobile communication device (e.g., a mobile phone) by sending specific information from the mobile device to a service center. Specifically, data is collected on individual components and/or procedures embedded within the mobile device and transmitted to the service center.<sup>1</sup> Claim 1 is illustrative:

1. A method of ascertaining a state of a mobile communication apparatus, comprising:

collecting data on at least one of individual components and procedures embedded within said mobile communication apparatus, based on status quo information derived therefrom, on a subscriber information module (SIM) card; and

radio transmitting said data from said mobile communication apparatus via said radio network to which said mobile communication apparatus is affiliated to a service center.

The Examiner relies on the following prior art references to show unpatentability:

Zhang	US 2001/0049263 A1	Dec. 6, 2001
Hiltunen	US 2004/0042604 A1	Mar. 4, 2004 (filed Sep. 6, 2001)
Raivisto	US 2004/0075675 A1	Apr. 22, 2004 (filed Oct. 17, 2002)

1. Claims 1-6 and 10-25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Zhang and Hiltunen (Ans. 3-6).<sup>2</sup>

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<sup>1</sup> See generally Spec. ¶¶ 0002, 0009.

<sup>2</sup> Although this rejection relies on Zhang and Hiltunen, the Examiner refers to Raivisto in the body of the rejection (Ans. 3). The Examiner and Appellant, however, acknowledge that this is a typographical error (Ans. 7-

2. Claims 7-9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Zhang, Hiltunen, and Raivisto (Ans. 6-7).

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs and the Answer<sup>3</sup> for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

*The Rejection Over Zhang and Hiltunen*

Regarding representative claim 1,<sup>4</sup> Appellant argues that the prior art fails to teach or suggest using a Subscriber Information Module (SIM) card to collect data on at least one individual component or procedure embedded within a mobile communication apparatus based on status quo information as claimed. According to Appellant, not only does the combination of references fail to teach or suggest this limitation, there is no motivation to combine the references to arrive at the claimed invention as the Examiner proposes (App. Br. 6-10; Reply Br. 2-3).

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8; Reply Br. 2). Accordingly, we presume that the Examiner intended to refer to Hiltunen—not Raivisto—in this rejection.

<sup>3</sup> We refer to (1) the Appeal Brief filed January 18, 2007; (2) the Examiner's Answer mailed July 26, 2007; and (3) the Reply Brief filed September 20, 2007 throughout this opinion.

<sup>4</sup> Appellant argues independent claims 1 and 13 together as a group, and does not separately argue dependent claims 2-6, 10-12, and 14-25 with particularity. *See* App. Br. 6-10. Accordingly, we select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner acknowledges that the base reference, Zhang, does not disclose a SIM card as claimed, but relies on Hiltunen for this teaching. The Examiner emphasizes that Hiltunen's SIM card is not a passive memory card, but a processor card: a card that stores, among other things, data and software used by a microprocessor to monitor or modify the phone's operation. This function of Hiltunen's SIM card, the Examiner contends, instructs the processor to collect and provide component data to the microprocessor for monitoring purposes. The Examiner adds that there is ample motivation to combine this teaching with Zhang so that information contained on the SIM can be transferred from one portable phone to another (Ans. 8-15).

*The Rejection Over Zhang, Hiltunen, and Raivisto*

Regarding representative claim 7,<sup>5</sup> Appellant argues that Raivisto does not cure the deficiencies of Zhang and Hiltunen, and that Raivisto, like Hiltunen, is not directed to the problem of identifying and gathering data on and providing solutions for problems in mobile phones (App. Br. 11-12). While Appellant acknowledges that Raivisto uses a SIM card to collect data, Appellant contends that Raivisto does not teach or suggest that a SIM card can be provisioned or programmed to collect data on at least one individual component or procedure embedded within the mobile communication apparatus based on status quo information as claimed (App. Br. 12). Appellant also argues that there is no motivation or suggestion to combine

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<sup>5</sup> Appellant argues claims 7-10 together as a group. *See* App. Br. 11-13. Accordingly, we select claim 7 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

the references' teachings to arrive at the claimed invention (App. Br. 12; Reply Br. 3).

## ISSUES

The issues before us, then, are:

(1) whether Appellant has shown that the Examiner erred in finding that the collective teachings of Zhang and Hiltunen teach or suggest the disputed limitations of representative claim 1, namely using a SIM card to collect data on at least one individual component or procedure embedded within a mobile communication apparatus based on status quo information as claimed; and

(2) whether Appellant has shown that the Examiner erred in combining the collective teachings of Zhang, Hiltunen, and Raivisto to arrive at the invention of representative claim 7.

## FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence:

1. Zhang discloses a mobile station monitoring system that (1) accumulates performance and error data in each mobile station 110, and (2) transmits this data to a central location. To this end, the performance and error data is transmitted via transmission signals 140 to a cellular network 120. The cellular network, in turn, transmits this information via transmission signal 150 to a service center or home base of the service provider 130 (Zhang, ¶ 0024; Abstract; Fig. 1).

2. As shown in Figure 3, each mobile station 110 includes a number of modules 300: (1) a maintenance task module 310; (2) a call processing module 320; (3) a user interface 330; (4) a memory management module 340; and (5) an “other task” module 350. The maintenance task module manages operation for the other modules when in maintenance mode (Zhang, ¶ 0031; Fig. 3).

3. During use, each module 320, 330, 340, and 350 recognizes any internal errors and transmits these errors to the maintenance task module 310 via transmission signals 322, 332, 342, and 352, respectively (Zhang, ¶ 0033; Fig. 3).

4. Upon receipt, the maintenance task module 310 analyzes each of these errors and transmits error information to the memory management module 340 which maintains the appropriate performance and error data logs (Zhang, ¶ 0035; Fig. 3).

5. During use, the maintenance task module monitors the performance and error data logs in the memory management module. At an appropriate time, the maintenance task module (1) retrieves the processing and error data information from the memory management module; (2) prepares the information for transmission; and (3) notifies the call processing module that the information is ready for transmission (Zhang, ¶¶ 0037-38).

6. After the maintenance task module provides the performance and error information to the call processing module, the call processing module transmits the information to the service center 130 for processing (Zhang, ¶¶ 0039, 0041).

7. Hiltunen discloses a radio telephone 206 with a transceiver 1, microprocessor 4, and a SIM card holder 10 (memory module receiver) contained within a handset (Hiltunen, ¶¶ 0032-33; Fig. 14).

8. In Hiltunen, a SIM card 208 is mounted in the SIM card holder 10. The SIM card stores various subscriber related data or applications including, among other things, function control information (Hiltunen, ¶ 0033-36; Figs. 2 and 14).

9. Hiltunen's SIM card is not a passive memory card. Rather, it is also a processor card that includes a memory and a facility for internally processing information. As such, data on the SIM card can be used by the microprocessor to control, modify, or monitor the phone's operation (Hiltunen, ¶ 0033-36; Figs. 2 and 14).

10. Raivisto discloses a mobile device/terminal with a service panel 302 that enables a particular service to be activated via the panel. When a service is activated, various actions can be initiated including a content download (Raivisto, ¶ 0026, 0036, 0044; Figs. 3, 4).

11. Raivisto teaches statically provisioning a mobile terminal 508 by configuring the terminal via a SIM card 502 or other removable memory cards (Raivisto, ¶ 0048; Fig. 5).

#### PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).



Discussing the question of obviousness of claimed subject matter involving a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

*KSR*, 127 S. Ct. at 1740. If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements in the fashion claimed.” *Id.* at 1740-41. Such a showing requires “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

If the Examiner’s burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence.

Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

## ANALYSIS

### *Representative Claim 1*

Based on the collective teachings of Zhang and Hiltunen noted in the Findings of Fact section above, we find no error in the Examiner's obviousness rejection of representative claim 1 based on those collective teachings.

First, we agree with the Examiner that Zhang discloses every limitation of claim 1 except for collecting the data on a SIM card (FF 1-6). In Zhang, the performance and error data for that particular mobile station are collected and logged in the memory management module (FF 4). This information fully meets "data on at least one of individual components and procedures embedded within [the] mobile communication apparatus" as claimed. Furthermore, Zhang transmits this collected data from the mobile device to a service center (FF 1, 5, 6)—a feature that likewise fully meets the limitation recited in the second main clause of claim 1.

We see no reason why a SIM card, such as that disclosed by Hiltunen (FF 7-8), could not be used in Zhang's system. As the Examiner indicates, Hiltunen's SIM card is not a passive memory card: it has significant processing functionality that is used to, among other things, monitor the phone's operation (FF 9). Providing such a capability in conjunction with the error and performance data logging capabilities of the memory management module and/or the maintenance task module of Zhang would

have been tantamount to the predictable use of prior art elements according to their established functions—an obvious improvement. *See KSR*, 127 S. Ct. at 1740.

In our view, using a SIM card in conjunction with the memory management and/or maintenance task modules in Zhang would, at a minimum, enable the performance and error data and associated functionality to be transferred from one similar device to another via the SIM card—a predictable result. We therefore find the Examiner’s rejection based on these collective teachings amply evidences articulated reasoning with rational underpinning to support the legal conclusion of obviousness.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner’s rejection of representative claim 1. Therefore, we will sustain the Examiner’s rejection of that claim, and claims 2-6 and 10-25 which fall with claim 1.

#### *Representative Claim 7*

We will also sustain the Examiner’s rejection of claim 7 based on the collective teachings of Zhang, Hiltunen, and Raivisto. First, the Examiner cited Raivisto merely to show that radio transmitting data during an initializing menu procedure as claimed in claim 7 is well known in the art (Ans. 6). Appellant did not persuasively rebut the Examiner’s findings in this regard — findings based on specific identified passages from Raivisto.

Appellant’s argument that Raivisto does not teach or suggest that a SIM card can be provisioned or programmed to collect data on at least one individual component or procedure embedded within the mobile communication apparatus based on status quo information as claimed (App.

Br. 12) is simply not germane to the reason why the Examiner cited the reference in the rejection. In any event, the collective teachings of Zhang and Hiltunen amply teach that disputed limitation as we indicated previously.

In short, Appellant has simply not shown error in the Examiner's reliance on Raivisto for the specific limitations of claim 7. Raivisto discloses a mobile device/terminal with a service panel that enables a particular service to be activated via the panel. When a service is activated, various actions can be initiated including a content download (FF 10). The Examiner's reliance on this disclosure as suggesting performing radio transmitting during an initializing menu procedure, at a minimum, has at least a rational basis that is unrebutted on this record.

Moreover, since Raivisto pertains to transmitting data in connection with a mobile terminal, we find Raivisto's teachings constitute analogous art and reasonably are combinable with Zhang and Hiltunen. That Raivisto teaches statically provisioning a mobile terminal 508 by configuring the terminal via a SIM card 502 or other removable memory cards (FF 11) only bolsters this conclusion.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner's rejection of representative claim 7. Therefore, we will sustain the Examiner's rejection of that claim, and claims 8 and 9 which fall with claim 7.

#### CONCLUSIONS OF LAW

Appellant has not shown that the Examiner erred in rejecting claims 1-6 and 10-25 under § 103 over the collective teachings of Zhang and

Hiltunen. Nor has Appellant shown that the Examiner erred in rejecting claims 7-9 under § 103 over the collective teachings of Zhang, Hiltunen, and Raivisto.

#### DECISION

The Examiner's decision rejecting claims 1-25 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2008-3710  
Application 10/693,470

AFFIRMED

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